

he results show se-
cerning the epide-
them, two were par-
than 50 % of patie-
ss 0 to 4 of clinical
flux free, which me-
rom functional CVI.
en the different clas-
fication changed in a
aner after 6 months
number of patients in
reased to the benefit
ptoms such as pain,
d cramps were signi-
001). This was asso-
ease in edema, when
circumferences with

results of the RELI-
ct validity and repro-
onnaire adaptations,
n of Quality-of-Life
This progression was
rovement of patients
ssment of CVI sym-
by evolution of the

Ardium, Arvenum,
Venitol

athophysiology,
ent

ndrome experi-
in vivo

Medicine, Timisoara,

al, simple, reproduci-
postthrombotic syn-
search of the patholo-
ation of some venous
ve techniques.

We have produced a
thrombosis of the pel-
el dogs using one or
associated with polido-
stem was harvested at
e thrombosis and we
microscopic studies of
ling tissues.

be the thrombosis (ob-
wed by the colaterali-
me). The repermeabi-
week, with the inevi-
and thickening of the
ndrome). Starting with
notice a very strong
r reaction, which tur-
one, making experi-
e difficult. By the time
venous wall was thik-
structure, based on a
pletely regenerated en-
ll showed an increased
tory aggression than the

venous one. In time, the distruction as well as
the valvular insufficiency becomes as important
as the parietal structure degradation and the pe-
rivenous tissue modifications. We have not no-
ticed cutaneous modifications of venous insuf-
ficiency or arterial vascular shortage.

Conclusions: The created experimental model
is an useful tool in the research of the patholo-
gy of the PTS, the evaluation of venous recon-
structive techniques and various therapeutic
mesures.

65) Active treatment of the subclavian vein thrombosis

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Aim: Increase of efficiency thrombolytic thera-
py in-patients with primary subclavian vein
thrombosis with use endovascular intervention.

Patients and methods: 39 patients (16-76 years
old) with effort subclavian vein thrombosis were
treated. Prescription of the disease changed from
1 day to 3 months. Localization of the thrombo-
sis was: subclavian vein only - 19 cases, axilla-
ry-subclavian vein - 14 cases, brachial-subcla-
vian vein segment - 6 cases. Alone thrombolytic
therapy was used in 29 cases. In 10 cases we
used thrombolytic therapy in combination with
aspiration thrombectomy and balloon angioplasty
residual stenosis of the subclavian vein.

Results: 94,6 % our patients despite of duration
of the disease demonstrated good patency of the
subclavian vein after thrombolytic therapy. Full
thrombolysis took place in 15 from 29 cases,
partial- in 12 cases. There were 2 cases of re-
thrombosis in a period 7 and 13 days after inter-
vention. These complications were connected with
dissection of intima as the result balloon angio-
plasty. 35 patients were investigated during 2
months - 5 years after treatment. Reocclusion,
as a result of the residual subclavian vein steno-
sis was founded in 2 cases. 3 patients had non-
severe symptoms of the chronic vein insufficient.

Conclusion: Thrombolytic therapy is high effi-
cacy method for treatment subclavian vein
thrombosis directed on elimination venous in-
sufficiency. The greatest prospects thrombolytic
therapy gets in a combination with miniinvasive
endovascular X-ray surgical interventions.

66) The complex injuries produced by percutaneous injection of fluids under very high pressure

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Commonly used implements (hydraulic pumps,
spray-guns, industrial - or even veterinary - in-
jection devices, ...) can induce high pressures
(up to 800 kg per cm² or more) in various - also
sometimes overheated - fluids, such as:

- Air, gases, water or numerous solutions, ...
- Mineral matters (saturated hydrocarbons) of
very diverse consistency (paraffins, tars, lub-
ricating oils and greases, waxes, ...)
- Organic substances (oils, fats, ...)

- Complex chemical compounds (paints, de-
tergents, silicones, pharmacodynamic
agents, ...)

When anyone among these elements is flung
through a small-sized jet, it may behave like a
high velocity projectile, then susceptible to per-
forate the skin. Therefore, it penetrates and
spread more or less in the deeper tissues, accord-
ing to its amount injected, its kinetic energy,
its viscosity and the consistency of the smitten
anatomic structures: these factors define the ex-
tend of the »mechanical damage«. The »physi-
co-chemical constitution« of the injected mate-
rial determines the type of the organism reac-
tion: it may appear as a non-symptomatic sur-
rounding of such foreign ingredient in an ordi-
nary scarrous tissue or generate a major inflam-
matory response with intoxication and tissue
necrosis leading to amputation. The subcutanea-
ous implantation of »supposed inert soft com-
ponents« (mainly hydrocarbure and silicones) is
used since one century in plastic surgery and their
biological tolerance has been widely appraised.
Such injections of »other stuffs« - resorbable or
not - chiefly concerns the fingers and the hand
in »accident at work«. The therapeutic manage-
ment must be adapted to both the »mechanical
lesion« and the »casual chemical alterations«. In
addition, »bacterial contamination« frequently
occurs. The literature about these faidy rare but
always serious injuries is reviewed. A case of
high pressure injection lesion by very fluid mi-
neral oil is reported: severe lymphosclerosis and
lymphedema developed over a seven-year peri-
od in the whole left upper limb with late migra-
tion of microscopic droplets of oil, very far away
from the original scattering site. Medico-legal
and therapeutic considerations are suggested
about this original observation an account of the
previous international clinical experiences.

67) Considerations cliniques et pathologiques au sujet des Leiomyosarcomes à point de depart veineux

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Les Leiomyosarcomes (LMS) issus de la paroi
veineuse résultent, soit de la transformation ma-
lignie d'un léiomyome, soit démontrent d'emblée
un caractère cancéreux. Les critères histologiques
permettant d'apprécier la malignité d'une masse
proliférative de cellules musculaires lisses sont
assez arbitraires (présence de plus de 5 mitoses
anormales par 10 champs microscopiques à un
grossissement de 100 fois). Il s'ensuit que la gra-
vité de certains cas est malaisée à définir for-
mellement. Les tumeurs veineuses primitives sont
rares: 90 % d'entre elles sont malignes et 80 %
de celles-ci sont des LMS Le diagnostic de ces
derniers est souvent établi par l'analyse histolo-
gique post-opératoire ou à l'autopsie. Les infor-
mations cliniques publiées au cours des 3 der-
nières décennies permettent de suspecter plus ai-
sément ce diagnostic et de traiter plus efficace-
ment un LMS. L'anamnèse suggère souvent une
occlusion veineuse avec stase mais sans aspect

»thrombophlébitique«. Deux cas person-
avec survie post-opératoire sans récidive
années et l'autre, décédé par embolisation
tipies de fragments tumoraux) ainsi que l
de la littérature, font considérer que les l
présentent sous 2 aspects fondamentaux:
- »Tumeur limitée«, dense, à croissance
guérissable« par exérèse.

- »Tumeur exophytique«, intraluminaire,
rapidement expansive dans le courant san-
départ d'un pédicule limité implanté dans
veineuse; les embolisations et métastase
naïres sont fréquentes tandis que les exte-
lymphatiques ou locales sont limitées. Ce
ons doivent guider les attitudes thérapeuti-

68) Particularites anatomotopographiques locales agissant comme facteurs étiopathologiques des subocclusions occlusions et thromboses de veines axillo-subclavières

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La thrombose veineuse profonde axillo-
vière (TVPAS) fut trop longtemps con-
»primaire«, »essentielle« ou »idiopathique«
concept a régressé avec la connaissance
fets pathogènes occasionnels de certaine
formations anatomotopographiques de la
cervico-scapulo-thoracique. Vers 1980,
quence des TVPAS. est estimée à 1 % de
des quatre membres. Les séquelles foncti-
les et les risques de thrombo-embolies
pulmonaires des TVPAS. ne sont pas res-
comme souvent importants. Par ailleurs d
breuses technologies modernes de traite-
monitrage biophysiques utilisent l
ellement la veine axillosubclavière com-
cès, temporaire ou permanent, à divers s
du courant sanguin et (ou) certains orga-
fréquence des TVPAS aurait ainsi presqu
tuplé. Chez 1/3 d'une population exempte
sémiologie significative, il existe de non
types de dispositions topographiques con-
les ou acquises, d'éléments anatomiques no-
ou »juxta-nerveux« (facteurs constituti-
qui sont susceptibles, dans des »conditi-
ticielles« (facteurs déterminants) de pro-
une TVPAS Une coagulopathie n'est qu
ment mise en évidence. L'utilisation ma-
de la veine axillosubclavière comme ac-
courant circulatoire accroît ce risque. Ce
thologie n'est compréhensible qu'en fonc-
la connaissance de l'évolution phylogénic
a amené l'»Homo Sapiens« à l'orthostatisme
base de plus de 2.000 examens cliniques
850 dégageants chirurgicaux de défilés o
scapulo-thoraciques depuis 1973, un rép-
de ces conformations anatomotopograp-
potentiellement pathogènes est établi. Ce
peuvent engendrer des déformations posi-
les de la veine éventuellement suivies de T
Une classification de ces »atypies« con-
onnelles ainsi que des indications, respecti-
des traitements conservatoires, par angio-
endoluminales ou chirurgicaux est propor-